We claim:

1. An isolated polypeptide which binds to MHC-Class II HLA-DR53 molecules, which comprises at least 18 and no more than 25 amino acids, said polypeptide having at lease one HLA-DR53 binding motif, said motif consisting of four amino acids, wherein the first amino acid is Tyr, Phe, Trp or Leu, and the fourth amino acid is Ala or Ser.

2. The isolated peptide of claim 1, wherein said peptide stimulates recognition and proliferation of CD4+ cells which are specific for complexes of said peptide and HLA-DR53 molecules.

3. The isolated peptide of claim 1, consisting of 18 amino acids.

4. The isolated peptide of claim 1, selected from the group consisting of SEQ ID NOS.: 8, 9, 10, 11, 12, and 13.

5. The isolated peptide of claim 4, selected from the group consisting of SEQ ID NOS.: 8, 9, and 10.

6. An isolated cytolytic T cell which is specific for complexes of MHC Class II molecule HLA-DR53 and SEQ ID NOS.: 8, 9 or 10.

7. An isolated complex of MHC-Class II molecule HLA-DR53 and the polypeptide of claim 1.

8. The isolated complex claim 6 wherein said peptide is SEQ ID NOS.:8, 9, 10, 11, 12 or 13.

9. Composition comprising the isolated polypeptide of claim 1, and at least one adjuvant.

10. The composition of claim 9, wherein said polypeptide is SEQ ID NOS.: 8, 9 or 10.

11. Isolated nucleic acid molecule consisting of a nucleotide sequence which encodes the isolated polypeptide of claim 1.

12. The isolated nucleic acid molecule of claim 11, wherein said isolated polypeptide is SEQ ID NOS.: 8, 9, 10, 11, 12 or 13.

13. Expression vector comprising the isolation nucleic acid molecule of claim 11, operatably limited to a promoter.

14. Composition comprising a mixture of at least two of the polypeptides defined by SEQ ID NOS.: 8, 9 and 10.

15. The composition of claim 14, further comprising an adjuvant.

16. Expression kit comprising a separate portion of each of

(i) an isolated nucleic acid molecule which encodes the isolated peptide of claim 1, and

(ii) an isolated nucleic acid molecule which encodes an HCA-DR53 molecule.

17. Recombinant cell comprising the isolated nucleic acid molecule of claim 11.

18. Recombinant cell comprising the expression vector of claim 13.

19. A method for stimulating proliferation of helper T cells, comprising contacting a T cell containing sample with a complex of MHC-Class II molecule HLA-DR53 and the peptide of claim 5, in an amount sufficient to stimulate proliferation of helper T cells which recognize said complex.

20. The method of claim 19, wherein said complex is on the surface of a cell.

21. The method of claim 20, wherein said cell is autologous to a subject to which said cell is administered.

22. The method of claim 20, wherein said cell is non-proliferative.

23. The method of claim 20, wherein said cell is a recombinant cell.

24. The method of claim 19, wherein said complex is in free form.

25. A method for stimulating proliferation of helper T cells, comprising administering an amount of at least one peptide of claim 5 to a subject who is HLA-DR53 positive, in an amount sufficient to form sufficient complexes of said peptide and HLA-DR53 to stimulate proliferation of helper T cells specific thereto.

26. The method of claim 25, comprising administering said at least one peptide locally.

27. The method of claim 25, comprising administering said at least one peptide in the form of a composition which comprises at least one adjuvant.

28. A method of stimulating proliferation of helper T cells in a subject, comprising administering to said subject an amount of a polypeptide or protein, the amino acid sequence of which comprises at least one of SEQ ID NOS.: 8, 9, or 10, in an amount sufficient to be processed to at least one peptide presented by MHC Class II molecules of said subject, in an amount sufficient to form a sufficient

number of complexes of MHC-Class II molecules and said at least one peptide to stimulate proliferation of helper T cells specific to said complexes.

29. The method of claim 28, wherein said subject is HLA-DR53 positive.

30. The method of claim 28, wherein said protein is the protein encoded by SEQ ID NO.: 1.

31. The method of claim 28, wherein said polypeptide comprises a plurality of copies of SEQ ID NOS.: 8, 9, or 10.

32. A method for stimulating proliferation of helper T cells in a subject comprising administering to said subject an amount of a cell transfected with (i) a nucleic acid sequence which codes for NY-ESO-1 and (ii) a nucleic acid sequence which codes for an MHC Class II molecule which presents a peptide derived from NY-ESO-1, wherein said peptide is presented by cells associated with said cancerous conditions, sufficient to alleviate said cancerous condition.

33. Method of claim 32, further comprising treating said cell to render it non-proliferative.

34. Method for stimulating proliferation of helper T cells in a subject comprising administering to said subject an amount of a reagent consisting essentially of non-proliferative cells having expressed on their surface non-covalent complexes of an MHC-Class II molecule and peptides derived from ESO-1.

35. Method for treating a subject afflicted with a cancerous condition comprising administering to said subject an antibody which specifically binds to an ESO-1 derived peptide expressed on a cancerous cell associated with said condition, said antibody being coupled to an anticancer agent, in an amount sufficient to treat said cancerous condition.

36. Method for preventing onset of a cancerous condition in a subject comprising administering an amount of the composition of claim 9 in an amount sufficient to prevent onset of said cancerous condition in said subject.

37. Method for preventing onset of a cancerous condition in a subject comprising administering an amount of the composition of claim 10 in an amount sufficient to prevent onset of said cancerous condition in said subject.

38. Method for preventing onset of a cancerous condition in a subject comprising administering an amount of the

composition of claim 14 in an amount sufficient to prevent onset of said cancerous condition in said subject.

39. Method for preventing onset of a cancerous condition in a subject comprising administering an amount of the expression vector of claim 13 in an amount sufficient to prevent onset of said cancerous condition in said subject.

40. Method for preventing onset of a cancerous condition in a subject comprising administering an amount of the composition of claim 15 in an amount sufficient to prevent onset of said cancerous condition in said subject.

41. Method for preventing onset of a cancerous condition in a subject comprising administering an amount of the recombinant cell of claim 17 in an amount sufficient to prevent onset of said cancerous condition in said subject.

42. Method for screening for cancer in a subject comprising assaying a sample taken from said subject for (i) complexes of an MHC-Class II molecules and a peptide derived from the protein encoded by SEQ ID NO.: 1, , or (ii) T helper cells specific for said complexes wherein presence of (i) or (ii) is indicative of possibility in cancer in said subject.

43. The method of claim 42, wherein said peptide is the peptide defined by SEQ ID NOS.: 8, 9, or 10.

44. Method for diagnosing a cancerous condition in a subject, comprising contacting an immune reactive cell containing sample of said subject to a cell line transfected with an isolated nucleic acid molecule which encodes the polypeptide of claim 1, and determining interaction of said transfected cell line with said immunoreactive cell, said interaction being indicative of said cancerous condition.

45. The method of claim 44, wherein said immune reactive cell is a helper T cell.

46. The method of claim 44, wherein said polypeptide is defined by SEQ ID NOS.: 8, 9, or 10.

47. A method for determining regression, progression or onset of cancerous condition comprising monitoring a sample from a patient with said cancerous condition for a parameter selected from the group consisting of (i) a complex of peptide derived from NY-ESO-1 protein and an MHC-Class II molecule, and (ii) helper T cells specific for complexes, wherein amount of said parameter is indicative of progression or regression or onset of said cancerous condition.

48. Method of claim 47, wherein said sample is a body fluid or exudate.

49. Method of claim 47, wherein said sample is a tissue.

50. Method of claim 47, comprising contacting said sample with an antibody which specifically binds with said complex.

51. Method of claim 50, wherein said antibody is labelled with a radioactive label or an enzyme.

52. Method of claim 50, wherein said antibody is a monoclonal antibody.

53. Method for diagnosing a cancerous condition comprising assaying a sample taken from a subject for a cell specific for a peptide derived from NY-ESO-1, complexed to an MHC Class II molecule, presence of said immunoreactive cell being indicative of said cancerous condition.

54. The method of claim 53, wherein said immunoreactive cell is a helper T cell.

55. An isolated peptide consisting of the amino acid sequence of the amino acid sequence of SEQ ID NO.: 7

56. Composition comprising the isolated peptide of claim 55, and an adjuvant.

57. Composition comprising the isolated peptide of claim 55, and at least one other peptide the amino acid sequence of which is found in the protein encoded by SEQ ID NO.: 1 and which complexes with an MHC molecule.

58. The composition of claim 57, wherein said MHC molecule is a Class I molecule.

59. The composition of claim 57, wherein said MHC molecule is a Class II molecule.

60. The composition of claim 57, wherein said at least one other peptide is the peptide defined by SEQ ID NOS.: 4, 5, 6, 8, 9, or 10.

61. Isolated nucleic acid molecule consisting of a nucleotide sequence which encodes the isolated peptide of claim 55.

62. Expression vector comprising the isolated nucleic acid molecule of claim 61, operably linked to a promoter.

63. Complex of the isolated peptide of claim 55 and an HLA-A2 molecule.

64. Recombinant cell comprising the isolated nucleic acid molecule of claim 61.

65. Recombinant cell comprising the expression vector of claim 62.

66. Non-proliferative cell which expresses the complex of claim 63 on its surface.

67. Composition comprising the non-proliferative cell of claim 66, and an adjuvant.

68. A method for stimulating cytolytic T cell proliferation, comprising contacting a cytolytic T cell specific for complexes of the peptide of claim 55 and an HLA-A2 molecule, in an amount sufficient to stimulate proliferation of said cytolytic T cells.

69. The method of claim 68, wherein said complexes are administered in the form of a composition.

70. The method of claim 68, comprising administering said complexes in the form of non-proliferative cells which present said complexes on their surface.

71. Method for stimulating proliferation of cytolytic T cells, comprising administering an amount of the peptide of claim 55 to an HLA-A2 positive cell sufficient to produce a sufficient number of complexes of said peptide and HLA-A2 molecules to provoke cytolytic T cell proliferation.

72. The method of claim 71, comprising administering said peptide in a composition wherein further comprises an adjuvant.

73. The method of claim 71, wherein said composition comprises at least one additional peptide.